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ARTICLE

On the Design of a Regulatory System

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Abstract
We briefly describe the structure of a regulatory system that alleviates many of the problems that arise when elected officials delegate rulemaking authority to government agencies. These problems include principal-agent issues, monopoly provision, information asymmetry, and tragedy of the commons. This structure better aligns the incentives of regulators with those of legislators and with the well-being of the public. We intend the solutions and process structure presented here not to serve as a collection of proposed changes but as guideposts for those hoping to make any part of the regulatory system better attuned to the needs of the populace.

Introduction

Although both economics and the regulatory process can be characterized as too complicated for non-experts to understand, Jerry Ellig always made them understandable. He accomplished this by application of first principles. For example, in the Regulatory Report Card project that Jerry led, even the most complex regulatory impact analysis could still be subjected to a set of simple but insightful questions: did the analysis consider multiple alternative approaches (Ellig and McLaughlin, 2008)? Were costs and benefits actually quantified? If not, were other quantitative approaches, such as a breakeven analysis, considered? While it may be difficult to perform a full blown benefit-cost analysis or understand one produced by, say, the Environmental Protection Agency, Jerry recognized that you could ask whether the analysis at least contained the elements that would be necessary for an analysis to add value to a rulemaking (Ellig, 2016).

We worked with Jerry on several projects, but perhaps the most ambitious was an attempt to answer the question: If we were building a model regulatory system for a new country, what would it look like? Answering that question, of course, requires knowing more about the jurisdiction's other features, especially with regard to how regulators are authorized in the first place. While we published the full study not long after Jerry's death as a Mercatus Center working paper, we suspect that its length and scope made it fairly inaccessible (Ellig et al., 2023). Thus, in the spirit of making things easy to understand the way Jerry always did, we are attempting to summarize the study here.

Even with a well-designed regulatory process, regulating markets and delegating rulemaking authority often lead to several problems—many of them similar to problems in the private sector. For example, principal-agent issues arise when legislators must delegate decision-making authority to regulators who may have different preferences or incentives, which can lead to shirking, agency drift, or regulator capture (McNollGast, 1987). Federal regulation creates monopoly provision of regulations and the information about their anticipated effects. Similarly, information asymmetry occurs when regulators have greater expertise and control the information legislators consume, making it easier to justify their preferences. Regulatory accumulation could also be considered a tragedy of the commons. Regulators who are incentivized to produce more rather than better regulations continue to pile onto the regulatory buildup, which carries its own set of consequences that are independent of those of individual rules (Coffey et al., 2020).

Creating a model regulatory system from scratch, we could build mechanisms into the system that individually address each of these delegation problems. Monitoring and enforcement would promote greater oversight to limit principal-agent issues. Separating the groups analyzing regulations from those writing them or providing incentives to regulators based on outcomes would alleviate some of the misalignment of incentives between the legislators and regulators (Ellig and Williams, 2014). Creating a regulatory analysis body within the legislative branch would alleviate both the monopoly provision of information and information asymmetry problems, similar to the way the Congressional Budget Office achieves this goal for budgetary issues (McLaughlin and Williams, 2014). Approaches such as regulatory budgeting, establishing an independent review commission, or sunsetting regulations would limit regulatory accumulation (Jones and McLaughlin, 2022; McLaughlin and Williams, 2014; Veit and Jantz, 2012).

While each of these elements would exist in some form within a model regulatory system, each also deserves much deeper exploration than we can offer in this article. Instead, we focus on the most crucial part of the regulatory system for ensuring a welfare-maximizing body of law: the process by which regulators develop, evaluate, and promulgate regulations. This process also has the benefit of addressing each of the delegation problems to some degree—although the aforementioned approaches, as well as others, are still necessary to produce the best outcomes.

In our full study, we provide a detailed structure of what a model regulatory process might look like, including the elements crucial to align the incentives of regulators with the desires of the legislature and the well-being of the public. The construction resembles a problem-solving exercise that any individual or firm might undergo on a regular basis to achieve effectiveness, efficiency, and accountability—but using the terminology of governance scholars. Some key differences remain, however, such as the role of the regulator as a generator of information and the absence of price signals.

We can break the structure into four components: ex ante assessment, decision criteria, public participation, and ex post assessment.

Ex Ante Assessment

The first step in making decisions that improve welfare is understanding how available options would impact welfare. When possible, regulators should quantify impacts. When quantifying is difficult or unreliable, regulators can discuss the impacts

qualitatively. The extensiveness of this ex-ante assessment should depend on the importance of the regulation, but all should:

1. Assess the nature, significance, and root cause of the problem the agency is trying to solve. This tells the regulator whether a problem exists, whether it can be solved by regulation, and how the regulator can tailor an effective solution.
2. Identify a wide variety of alternative solutions using different approaches, such as information disclosure, market-oriented approaches, performance standards, design standards, direct regulation, and direct controls. Alternatives should also include adjustments to components of the regulation, such as different requirements or enforcement methods based on firm size.
3. Define the benefits the agency seeks to achieve in terms of ultimate outcomes that affect citizens' quality of life and assess each alternative's ability to achieve those outcomes. Examples of ultimate outcomes might be reduced injuries or deaths, decreased costs to consumers, or improved literacy, rather than improved enforcement or better information. Specifying the desired outcomes will also improve ex-post assessment.
4. For each alternative, identify the opportunity cost to society (the value of the most valuable alternative given up to pursue the chosen course of action). Opportunity costs include not just compliance, but also social opportunity costs, such as the value of the time people spend waiting in line or the reduction in automobile sales.
5. Assess relevant distributional impacts on particular groups based on the nature of the regulation. This often includes small businesses, low-income households, or historically marginalized communities. The distributional analysis should answer three questions:
    a. Is the group a significant source of the problem the regulation addresses?
    b. How do the benefits to society from regulating this group compare to the costs under each alternative?

Legislators may also want regulators to consider values that are not traditional benefits or costs, such as equity, human dignity, privacy, or individual liberty. In these circumstances, regulators should clearly define the factor and present evidence showing how each alternative is likely to affect the factor (Ellig and Williams, 2014).

Decision Criteria

Two practices can ensure that assessments inform, rather than justify, regulations. First, regulators should publish the assessment some specified period of time prior to publishing the proposed regulation. Second, regulators should explain how the analysis informed the decision and why their decision maximizes welfare. This may include quantitative, qualitative, or non-traditional factors like those discussed earlier. The regulator should also specify the outcomes the regulation is supposed to achieve, the expected timeline for achieving them, and performance metrics the regulator can use to evaluate the regulation's impact in the ex-post assessment—even better if these metrics are created in a way that leads to the generation of early indicator data.

Public Participation

Estimating regulatory impacts is difficult not only because much economically relevant knowledge is dispersed, tacit, difficult to articulate, and subjective (that is, based on perceptions), but also because regulators act in precisely those cases where market failures exist. This implies that market data is less reliable because market prices are inaccurate, or the markets are entirely absent. Public participation can help fill a regulator's knowledge gaps by supplying relevant price data or information that would normally affect market prices, if a market existed. This information will be imperfect, but it will nonetheless help regulators make better decisions.

Regulators should always solicit public comments when regulating, but there are additional ways agencies can engage the public when appropriate. One approach is negotiated rulemaking, in which the regulating agency meets with parties that have a significant stake in the rule to try to come to a consensus on a fair but effective rule. Another approach is public hearings, in which the agency invites the public to express their views following the issuance of a rule proposal. In all approaches to public participation, transparency and attention to potential distributional effects are important, since those with the highest stakes in the rule may seek to benefit themselves at the expense of others.

In deciding what approaches to use, regulators should consider not only what forms provide the most relevant information for a given regulation, but also what forms allow all relevant parties to easily understand and engage in the process. A formal assessment of each approach would be too onerous, but when legislation does not dictate the public participation approach, regulators should explicitly state why they chose specific approaches.

Ex-Post Assessment

Even after taking these steps, regulations will not be perfect. Much of the data are inaccurate, and regulators cannot know how other factors will change or predict all unintended consequences. For these reasons, ex-post assessment still requires the consideration of how markets, technology, or other factors could play a role in the measurement of a rule's effect based on subsequent developments.

The goal of ex-post assessment is to provide feedback that allows regulators to make necessary adjustments to existing regulations and to make better decisions on future regulations. This procedure should lead the regulator to one of three possible decisions: maintain the regulation, eliminate the regulation, or alter the regulation.

The essential elements that a regulator should evaluate in an ex post assessment include:

1. Effectiveness: an ex ante assessment should first address whether the regulation delivered the desired outcomes. Causal inference using statistical analysis is the gold standard, but the two crucial elements of this section are that the regulator use the appropriate techniques for establishing the highest degree of confidence and that the regulator provides honest and complete information about the degree of confidence in their finding. Depending on the complexity, the regulator may need to consider the mechanism by which the regulation is supposed to achieve an outcome.
2. Persistence of the problem: the next step is to determine whether the problem the regulation addressed has largely disappeared and, if so, whether removing the regulation would cause the problem to reappear. In many cases, business practices or consumer preferences may change so significantly that a regulation's design becomes obsolete.

3. Unintended consequences: if the regulator determines the regulation is effective and not obsolete, then the final step is to evaluate whether it can be improved to reduce unintended consequences. Primary among the unintended consequences of regulations should be the inhibition of innovation.

Beyond these essential elements, regulators should ask other questions that could lead to welfare-improving changes. For example, does the rule interact with other rules, and can the set of rules governing this topic be simplified without increasing risk? Or, have the distributive impacts of the rule been consistent with what was anticipated?

Conclusion

We explored the intricacies of constructing a model regulatory system from scratch, emphasizing the necessity of addressing principal-agent issues, regulatory accumulation, information asymmetry, and monopoly provision in the regulation process. By integrating comprehensive ex ante assessments, clear decision criteria, active public participation, and thorough ex post evaluations, we outline a systematic approach to enhance regulatory effectiveness, efficiency, and accountability. Our approach includes mechanisms such as regulatory budgeting, independent review commissions, and sunset provisions to limit regulatory buildup, and stresses the importance of separating regulatory analysis from the drafting process to mitigate misaligned incentives.

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